



GREEN BUILDING INITIATIVE

FREQUENTLY ASKED QUESTIONS

What is the Green Building Initiative & Why is it important? The Green Building Initiative (Executive Order S-20-04) calls for public buildings to be 20 percent more energy efficient by 2015 and encourages the private sector to do the same. By implementing sustainable practices in the facilities it owns, leases, retrofits or maintains, California can conserve resources, reduce pollution, and save money. At the same time, the State can create healthier and more productive places in which to work, learn and do business.

What is "Green Building and Green Buying?" Sustainable or "green building" refers to the practice of designing, constructing, operating, maintaining, and replacing buildings in ways that save energy, conserve natural resources and reduce pollution. Green building practices also create healthier and more productive indoor environments.

"Green buying" refers to purchasing "environmentally preferable products"—products that are long lasting, high quality, less toxic, reusable, and easy to recycle. Environmentally Preferable products use less materials, water, and energy, minimizing the impact on California's natural environment.

Why is State government taking the lead on Green issues?

As Governor Schwarzenegger put it, "California is blessed with vast resources...we rededicate ourselves to making California cleaner, greener and more prosperous. The green building approach builds in conservation from the ground up...It's good for business and it's great for the environment."

Why is it important for California businesses, schools, local governments, etc., to follow the lead of State government in going Green?

There are many reasons, including:

- **Saving energy, resources and money**
Sustainable, resource and energy-efficient buildings use less energy, water and materials to operate. The dollar savings grow over time, often paying back their initial cost—and more. In addition to saving money and resources, sustainable buildings are proving to be healthier and more productive places in which to work, learn and do business.
- **Protecting the environment**
Climate change is driven, in large part, by carbon dioxide and other greenhouse gases derived from burning fossil fuels. In California, electricity production and industry are a major source of fossil fuel-related carbon dioxide. Other harmful

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emissions released by burning fossil fuels to produce electricity—sulfur dioxide and nitrous oxide—are two of the primary sources of smog. Energy efficiency helps reduce the need to generate electricity.

- **Promoting energy security**

Energy efficiency helps ensure that California has stable and reliable electricity service by making the system less vulnerable to electricity supply shortages. Energy efficiency improvements reduce overall demand and, more important for reliability, shave demand at peak hours—those hours when energy demand is highest and blackouts are likely to occur if supply is low.

Will "going green" cost the taxpayers more money? Sustainable buildings consume less energy and require fewer resources to operate. With rising energy costs, energy efficient green buildings and buildings that generate their own power onsite have a significant positive economic impact on both the State's energy bills and energy needs.

How soon does the State expect to see the benefits of the Governor's initiative?

The benefits of sustainable building practices are already being seen. There are several examples including:

- Approximately 20 State office buildings have achieved U.S. EPA ENERGY STAR scores of 75 or better. ENERGY STAR is a national rating system that measures a building's energy performance on a scale of 1 to 100. All existing State buildings larger than 50,000 square feet must meet an ENERGY STAR rating of at least 75 by 2015.
- The process of measuring—or benchmarking—the energy performance of 250 of the largest State buildings will be completed this year.
- No-cost or low-cost "tune-ups" in State buildings are delivering impressive savings: For example, at the Edmund G. "Pat" Brown/Public Utilities Commission Building in San Francisco, energy saving measures have been implemented for more than 200,000 kilowatt hour savings—equivalent to saving about 10 percent of the building's annual utility bill. *Similar results are expected from tune-ups of the Elihu Harris State Office Building in Oakland, and the Santa Ana State Office Building.*
- More than 100 buildings larger than 50,000 square feet are scheduled to be retro-commissioned throughout the state. *Retro-commissioning determines whether existing building systems are operating as efficiently as possible, and recommends the implementation of low cost energy saving measures, as needed.*
- To date, six buildings have achieved Leadership in Energy and Environmental Design (LEED) certification with 18 more projects (43 separate buildings) pursuing LEED standards.

LEED is the U.S Green Building Council's certification program that encourages design and construction practices that reduce the negative impact of buildings on the environment and occupants. LEED certifications come in four levels beginning with LEED-Certified, then LEED-Silver, LEED-Gold and LEED-Platinum.

Green Building Glossary:

- **Benchmarking:** The process of comparing energy use patterns between similar buildings allowing a determination of whether buildings measure up to expectations, or if improvements are needed.
- **Commissioning:** The term comes from the shipbuilding industry where a commissioned vessel is one deemed ready for service. In the world of building construction, commissioning is the process of ensuring that building systems are designed, installed, functionally tested, and capable of being operated and maintained according to the owner's operational needs.
- **LEED:** LEED stands for Leadership in Energy and Environmental Design. LEED is a nationally known and accepted green building certification program. Developed by the U. S Green Building Council, LEED encourages design and construction practices that reduce the negative impact of buildings on the environment and occupants.

LEED certifications come in four levels beginning with LEED-Certified, then LEED-Silver, LEED-Gold and LEED-Platinum.

- **Recommissioning:** A process applied to existing buildings that have been commissioned or retro-commissioned. Occurs periodically, ideally as part of the O & M or Operating and Maintenance schedule. Ensures a building is still operating optimally and ensures commissioning results persist.
- **Retro-commissioning:** A process applied to existing buildings that have never been commissioned. Retro-commissioning determines whether existing building systems are operating as efficiently as possible, and recommends the implementation of low-cost energy saving measures, as needed.
- **Environmentally Preferable Purchasing:** Environmentally Preferable Purchasing (EPP) is the procurement of goods and services that have a reduced impact on human health and the environment as compared to other goods and services serving the same purpose.

California law requires State government to practice Environmentally Preferable Purchasing. See Public Contract Code, sections 12400-12404 for more information.

Is Green just a “tree-hugger thing”? Sustainable building is all about the bottom line: it saves money, conserves resources, and creates healthier and more productive environments in which to work, learn and do business. Green building and green buying is good for the environment and good for the economy as well. (rev. 6-2006)